

### **REMARKS**

Claims 42-81 are currently pending in the subject application, and are presently under consideration. Claims 42-81 are rejected. Claims 42-61 and 63-81 have been amended. Claim 62 has been canceled. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

#### **I. Objection to the Drawings**

The drawings have been objected to for failing to include reference numbers 103, A3, A5, A7, A8 and A9. A replacement sheet for FIG. 1 is being submitted with this amendment. FIG. 1 has been amended to add reference numbers 103 and 105. Additionally, interfaces A3, A5, A7, A8 and A9 have not been added since page 2, lines 27-32 of the Specification do not require that the items be in the drawings. A3, A5, A7, A8 and A9 are specific types of signaling that are found in CDMA2000 systems (See e.g., <http://www.protocols.com/pbook/cdma2000family.htm>), while page 18, line 1 of the Specification states that FIG. 1 illustrates a generic mobile communication network that does not necessarily implement a CDMA2000 system. Thus, inclusion of the interfaces A3, A5, A7, A8 and A9 in FIG. 1 would be unduly limiting and therefore, not appropriate. Accordingly, withdrawal of the objection to FIG. 1 is respectfully requested.

FIGS. 5a and 5b have been objected to by the Examiner for having labeled texts that are overlapped with arrowed signal flow lines. Applicant's representative submits that FIGS. 5a and 5b comply with all 35 U.S.C. statutory requirements. Furthermore, Applicant's representative submits that the label texts overlapping arrowed signal flow lines would assist a reader of FIGS. 5a and 5b in discerning as to which arrowed signal flow line each label belongs. Accordingly, withdrawal of the objection to FIGS. 5a and 5c is respectfully requested.

**II. Objections to the Specification**

The Specification has been objected to for informalities. A substitute Specification is being submitted with this amendment. Applicant's representative respectfully submits that the amendments to the Specification correct the informalities and bring the Specification into conformity with current U.S. practice. Additionally, the Specification has been amended to clarify that a computer readable medium includes tangible hardware, but excludes pure electrical signals. The amendments to the Specification would be readily apparent to one of ordinary skill in the art in view of the originally filed Specification and drawings. Thus, no new matter should be considered to have been added. Entry of the substitute Specification is respectfully requested.

**III. Objections to the Claims**

Claims 47, 43-50, 42-53, 56-61, 64-66, 68-69, 75-76 and 80 are objected to for informalities. Claims 47, 43-50, 42-53, 56-61, 64-66, 68-69, 75-76 and 80 have been amended to correct these informalities. Accordingly, withdrawal of this objection is respectfully requested.

**IV. Rejection of Claims 42, 44, 51-53, 55-61, 62 and 70 Under 35 U.S.C. §112, second paragraph**

Claims 42, 44, 51-53, 55-61, 62 and 70 stand rejected under 35 U.S.C. §112, second paragraph, for failing to point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 62 has been canceled, thus rendering its rejection moot. Claims 42, 44, 51-53, 55-61 and 70 have been amended to correct formal matters. Applicant's representative respectfully submits that claims 42, 44, 51-53, 55-61 and 70 are no longer rejectable under 35 U.S.C. §112. Accordingly, withdrawal of this rejection is respectfully requested.

**V. Rejection of Claims 42-53, 63-70, 72, 74-76, 79 and 80 Under 35 U.S.C. §101**

Claims 42-53, 63-70, 72, 74-76, 79 and 80 stand rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter. Claims 42, 51, 70, 72, 74 and 79 have been amended to recite that a method is a computer implemented method. Applicant's representative respectfully submits that amended claims 42, 51, 70, 72, 74 and 79 are now tied to a particular machine, as requested by the Examiner. Accordingly, claims 42, 51, 70, 72, 74 and 79, as well as the claims depending therefrom, are no longer rejectable under 35 U.S.C. §101, and withdrawal of this rejection is respectfully requested.

**VI. Rejection of Claims 54, 62-69, 71, 73, 77, 78 and 81 Under 35 U.S.C. §101**

Claims 54, 62-69, 71, 73, 77, 78 and 81 stand rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter. Claim 62 has been canceled, thus rendering its rejection moot. Claims 54, 63, 67, 71, 73, 77, 78 and 81 have been amended to recite a computer readable medium storing computer code and computer executable instructions, as suggested by the Examiner. Moreover, as noted, the Specification has been amended to clarify that a computer readable medium comprises tangible hardware (e.g., memory), and explicitly excludes a pure electrical signal. Thus, claims 54, 63, 67, 71, 73, 77, 78 and 81, as well as the claims depending therefrom, are no longer rejectable under 35 U.S.C. §101. Accordingly, withdrawal of this rejection is respectfully requested.

**VII. Rejection of Claims 42-52, 54-64, 67-69 and 71-81 Under 35 U.S.C. §102**

Claims 42-52, 54-64, 67-69 and 71-81 stand rejected under 35 U.S.C. §102 as being anticipated by U.S. Patent Publication No. 2003/0037190 to Alexander, et al. ("Alexander"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

As noted above, claim 62 has been canceled. Thus, the rejection of claim 62 is now moot. Moreover, Applicant's representative respectfully submits that claim 71 was rejected in error. Claim 71 depends from claim 70, which was not rejected as being anticipated by Alexander. Accordingly, withdrawal of the rejection of claim 71 is respectfully requested.

Claim 42 has been amended to clarify that a minimum predetermined value of a first data structure is defined in terms of a plural number of parameter sets and/or in terms of a time between writing a sets of parameters of sequential sets of parameters into the first data structure at the time sufficient to write sets of parameters successively into a first first out (FIFO) data structure. These amendments to claims 42 are supported by at least FIG. 1 and claim 44 as originally filed. These amendments are also supported by at least pages 8-9 of the Specification, which state that a delay sufficient to write plural sets of parameters successively into a FIFO may be needed.

Alexander does not disclose the first data structure recited in amended claim 42. Alexander discloses a FIFO system for interfacing between data paths of different widths (See e.g., Alexander, Par. [0030]). In Alexander, data input via an input data stream having a first data width can be buffered and subsequently read out to an output stream having a second width (See Alexander, Par. [0031]). Moreover, in Alexander, a FIFO unit 102 supports a plurality of logical FIFOs for storing data (See Alexander, Par. [0030]). For instance, a tag memory store 106 can accommodate a buffering of flag signals associated with data received on an input stream (See Alexander, Par. [0032]). In Alexander, the logical FIFOs storing the tags are addressed identically to the logical FIFOs that hold the data (See Alexander, Par. [0057]). Furthermore, paragraph [0068] of Alexander indicates that the logical FIFOs can be full or empty. However, in contrast to the first data structure length recited in amended claim 42, nothing in Alexander discloses that the disclosed logical FIFOs have a predetermined minimum value. Accordingly, the logical FIFO disclosed in Alexander does not read on the first data structure recited in amended claim 42.

Further, Alexander discloses that a merge network 202 accepts input streams and produces merely a time delay multiplexing stream of constant width internal data (See Alexander, Pars. [0034]-[0040]). In Alexander, the same process of concatenation and width extensions can be performed on either the data or flags (See Alexander, Pars. [0046] and [0048]). Alexander also discloses that a FIFO is part of a shuffle buffer system 602 to create coherent groups 622 based on input data width (See Alexander, Par. [0072]). Logic that provides write

control functions for a conventional FIFO buffer may be used (See Alexander, Par [0081]). However, in Alexander, the read logic is merely similar to that of a standard FIFO queue control unit since paragraph [0082] of Alexander explicitly discloses that a series of read addresses generated for successive words read out of the FIFO is not sequential. Thus, the input merge network 202 does not read on the first data structure recited in amended claim 42. In fact, no structure or function disclosed in Alexander reads on the first data structure recited in amended claim 42. Accordingly, Alexander does not anticipate amended claim 42, and amended claim 42, as well as claims 43-49 depending therefrom, should be patentable over the cited art.

Claim 55 has been amended to recite at least one first listener, attached to a first region of a data pipe, wherein at least some of the first listener output data is not valid until after a delay greater than a time sufficient to write data successively into the pipe. That is, amended claim 55 establishes a temporal relationship between the validity of data in the first listener and the writing of data successively into the data pipe. Moreover, these amendments to claim 55 are supported by at least pages 8-9 of the Specification. As discussed above with respect to amended claim 42, Alexander discloses logical FIFOs that hold data (See e.g., Alexander, Pars. [0030] and [0031]). However, nothing in Alexander discloses that data in the logical FIFOs is not valid until after a delay greater than a time sufficient to write data successively into the pipe in contrast to the first listener recited in amended claim 55. Thus, the logical FIFOs disclosed in Alexander do not read on the first listener recited in amended claim 55. In fact, no structure or function disclosed in Alexander reads on the first listener recited in amended claim 55. Accordingly, Alexander does not anticipate claim 55, and claim 55, as well as claims 56-61 depending therefrom, should be patentable over the cited art.

Claim 63 has been amended in a manner similar to claim 55. Thus, for reasons similar to those discussed with respect to amended claim 55, amended claim 63, as well as claims 64-65 depending therefrom, should be patentable over the cited art.

Claim 67 has been amended to recite a data culling module coupled between a first FIFO output and a second data processing module input to selectively cull data to reduce a rate of data processed by the second data processing module compared with the first FIFO module. The

amendments to claim 67 are supported by at least claim 70, as originally filed. Alexander does not disclose the culling module recited in amended claim 67. In fact, Alexander discloses that the speed of RAM should be selected according to a maximum aggregate bandwidth (See Alexander, Par. [0054]). That is, no structure or function disclosed in Alexander reduces the rate that data is processed, in contrast to the culling module recited in amended claim 67. Accordingly, Alexander does not anticipate amended claim 67, and amended claim 67, as well as claims 68-69 depending therefrom, should be patentable over the cited art.

Claim 72 has been amended in a manner similar to claim 42. Thus, for reasons similar to those discussed above with respect to amended claim 42, amended claim 72 is not anticipated by Alexander. Accordingly, amended claim 72, as well as claim 73 depending therefrom, should be patentable over the cited art.

Claim 74 has been amended to recite discriminating between communication sessions to associate a current message with a communication session of a plurality of communications sessions to which the current message belongs. This amendment is supported by at least claims 66, 69 and 78 as originally filed, as well as page 9, lines 10-15 of the Specification. Claim 74 has also been amended to clarify that a communication session is a thread of messages having at least one network entity in common, and that the discriminating is performed on the basis of information in the message for linking the message into the thread. This amendment is supported by at least claim 79, as originally filed, as well as FIG. 4c and page 7, lines 6-24 of the Specification.

Alexander does not disclose discriminating between communication sessions, as recited in amended claim 74. In Alexander, no structure or function identifies communication sessions. For instance, paragraph [0074] of Alexander (cited by the Examiner) discloses start/end-of-packet flags in relation to bytes of a packet. However, nothing in the cited section of Alexander (or elsewhere in Alexander) discloses that the start/end-of-packet flags provide any indication of the source or destination of the associated packets. In fact, Alexander does not even consider communication sessions, as recited in amended claim 74 (threads of messages involving the same network entity or to identifying entities to which a message belongs). Accordingly,

Alexander does not disclose discriminating between communication sessions, as recited in amended claim 74.

Additionally, Alexander does not disclose updating a last value store associated with a communication session with parameters of a previous message of a session in response to associating the current message with a communication session of a plurality of communication sessions, as recited in claim 74. In fact, Alexander does not disclose any association between any store and a communication session. Thus, for at least the foregoing reasons, Alexander does not anticipate amended claim 74. Therefore, amended claim 74, as well as claims 75 and 76 depending therefrom, should be patentable over the cited art.

For reasons similar to those discussed with respect to claim 74, amended claims 78 and 79 are not anticipated by Alexander. Accordingly, amended claims 78 and 79, as well as claims 80-81 depending therefrom should be patentable over the cited art.

For the reasons described above, claims 42-52, 54-61, 63, 64, 67-69 and 71-81 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

#### **VIII. Rejection of Claims 53, 65, 66 and 70 Under 35 U.S.C. §103(a)**

Claims 53, 65, 66 and 70 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Alexander in view of U.S. Patent Publication No. 2004/0085982 to Choi ("Choi"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 53 depends from amended claim 51 and is patentable for at least the same reasons as amended claim 51, and for the specific elements recited therein. Moreover, in rejecting claim 53, the Examiner cites Choi solely for Choi's disclosure of a digital mobile phone network (See Office Action, Pages 20-21, citing Pars. [0004] and [0017] of Choi). However, the addition of Choi does not make up for the deficiencies of Alexander, discussed with respect to amended claim 51, from which claim 53 depends. Accordingly, Alexander taken in view of Choi does not make amended claim 53 obvious, and amended claim 53 should be patentable over the cited art.

Claims 65 and 66 depend from amended claim 63 and are patentable for at least the same reasons as claim 63, and for the specific elements recited therein. Moreover, in rejecting claims

65 and 66, the Examiner cites Choi solely for Choi's disclosure of writing data for specific links (See Office Action, page 21, citing paragraph [0098] of Choi). However, the addition of Choi does not make up for the deficiencies of Alexander discussed with respect to amended claim 63, from which claims 65 and 66 depend. Accordingly, claims 65 and 66 should be patentable over the cited art.

Alexander taken in view of Choi does not teach or suggest reading labeling and culling data related to unwanted messages, as recited in claim 70. For reasons similar to those discussed above with respect to amended claim 67 (and as acknowledged on page 23 of the Office Action), no structure or function taught or suggested in Alexander culls data related to unwanted messages, as recited in claim 70. In fact, Alexander fails to teach or suggest any loss of data. Moreover, the addition of Choi does not make up for the deficiencies of Alexander. In rejecting claim 23, the Examiner contends that paragraphs [0004], [0017] and [0098] of Choi discloses this element of claim 23 (See Office Action, Page 23). Paragraph [0017] of Choi discloses that data is discarded because no further data can be written in the queue. As best understood, in the cited sections of Choi, the disclosed discarding of data is a result of a data overflow. However, nothing in the cited sections of Choi teaches or suggests culling (selecting and removing) data related to unwanted messages, as recited in claim 70. Thus, Alexander taken in view of Choi does not teach one of ordinary skill in the art how to implement the methodology of claim 70. Accordingly, Alexander taken in view of Choi does not make claim 70 obvious, and claim 70 should be patentable over the cited art.

For the reasons described above, claims 53, 65, 66 and 70 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.



**CONCLUSION**

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

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